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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/764,282	01/23/2004	Hassan Benamcur	1759.051A	9192
23405 7590 04/18/2008 HESLIN ROTHENBERG FARLEY & MESITI PC 5 COLUMBIA CIRCLE ALBANY, NY 12203			EXAMINER SASAN, ARADHANA	
			ART UNIT 1615	PAPER NUMBER
			MAIL DATE 04/18/2008	DELIVERY MODE PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/764,282	Applicant(s) BENAMEUR ET AL.	
	Examiner Aradhana Sasan	Art Unit 1615	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 05 November 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 14-28 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 14-28 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 13 June 2007 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☒ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Status of Application

1. The remarks, amendments, Request for Continued Examination filed on 11/5/07 are acknowledged.
2. Claims 14, 18 and 21 have been amended.
3. Claims 14-28 are included in the prosecution.

Continued Examination Under 37 CFR 1.114

4. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 11/5/07 has been entered.

Response to Arguments

Rejection of claim 14 under 35 U.S.C. § 112, first paragraph

5. Applicants' arguments, see Page 5, filed 11/5/07, with respect to the rejection of claim 14 under 35 U.S.C. § 112, first paragraph as being enabling for a statin as a water insoluble active, but not enabling for any active principle have been fully considered but are not persuasive. Applicants amended claim 14 to include the term "hydrophobic" before active principle. Applicants point out that the invention as presently claimed is particularly well suited to use with hydrophobic active principles and this is demonstrated by the comparison of figures 3 and 4. Applicants state that and that the

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application is enabling for all hydrophobic active principles. However, the only active ingredient used in the working examples is simvastatin. Applicants' assertion that the properties of the self micro-emulsifying carriers taught by the application can enable the dissolution of any hydrophobic active principle is not substantiated by using hydrophobic active ingredients different from simvastatin. Any hydrophobic active ingredient will not interact with the lipophilic/hydrophobic phase of the composition because not all hydrophobic active ingredients have this property. Undue experimentation would be required to use any hydrophobic active principle with the invention.

Rejection of claims 14-17, 24-25, and 27 under 35 U.S.C. § 103(a)

6. Applicants' arguments, see Pages 5-8, filed 11/5/07, with respect to the rejection of claims 14-17, 24-25, and 27 under 35 U.S.C. § 103(a) as being unpatentable over Farah et al. (US 6,054,136) have been fully considered but are not persuasive.

Applicants point out that where Farah is describing caprylic and capric fatty acids it is in the context of C8-C:8 fatty acid esters that are not present in the surfactant or co-surfactant phase of the SMEDDS® but in the lipophilic phase. Applicants submit that there is no suggestion in Farah to use caprylic and capric acid esters of propylene glycol in the co-surfactant phase of a self micro-emulsifying carrier and that where caprylic and capric fatty acids are disclosed in Farah they are esterified with glycerol and polyethylene glycol, not propylene glycol as in the co-surfactant phase of the claimed invention. Applicants state that the recitation in the pending claims of propylene glycol monocaprylate in the co-surfactant phase of a self micro-emulsifying carrier is not taught or suggested by Farah.

This is not found persuasive because propylene glycol monocaprylate is a product (see data sheets for CAPRYOL™ 90 and CAPRYOL™ PGMG) that has been commercially available since approximately 1998 (see letter from Gattefossé USA). One with ordinary skill in the art would use this commercially available product in a SMEDDS (see section on Uses in the data sheet for CAPRYOL™ 90) application. CAPRYOL™ PGMG can be used as a co-surfactant for microemulsions (see data sheet for CAPRYOL™ PGMG). Applicants' arguments regarding the lack of a suggestion in Farah to include propylene glycol monocaprylate in the co-surfactant phase of a self micro-emulsifying carrier are not persuasive because one of ordinary skill in the art would use the propylene glycol monocaprylate in a self micro-emulsifying system. Applicants' arguments regarding the lack of a suggestion in Farah to use caprylic and capric acid esters of propylene glycol in the co-surfactant phase of a self micro-emulsifying carrier are not persuasive because the data sheet for CAPRYOL™ PGMG shows that the propylene glycol monocaprylate can be used as a co-surfactant in microemulsions. Moreover, Farah teaches that "one of the main values of the invention is that, irrespective of the amount of water supplied by the gastric or intestinal physiological fluid of the human or animal body ... the mixture composed of this amount of water and the composition will form a microemulsion, enhancing the solubility of the active principle or agent, which increases the bioavailability in spite of the appreciable proportion of this physiological fluid" (Col. 4, lines 9-16).

Applicants point out the comparison between figure 3 and 4 which shows a dramatic change in the area of the microemulsion that results from the use of propylene

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glycol monocaprylate in the co-surfactant phase of a self micro-emulsifying carrier (figure 4) as compared with the use of lauric esters of propylene glycol in the co-surfactant phase of a self micro-emulsifying carrier in Farah (figure 3). Applicant states that one skilled in the art would have no reason to expect such a significant change in the properties of the composition on going from a lauric ester of propylene glycol to a caprylic ester of propylene glycol in the co-surfactant phase of a self micro-emulsifying carrier. Applicant states that the dramatic and unexpected increase in the percentage of the solution that is a micro-emulsion provides for the unexpected increase in the rate of dissolution of hydrophobic active principles achieved by the presently claimed invention.

This is not found persuasive because the inclusion of a propylene glycol monocaprylate in the co-surfactant phase of a micro-emulsifying carrier would be part of routine experimentation for one of ordinary skill in the art since the product was commercially available, and the use of the propylene glycol monocaprylate would lead to an improvement in the dissolution of an active agent in a microemulsion. Therefore, it would have been obvious to include the propylene glycol monocaprylate in the self micro-emulsifying carrier used by Farah and achieve an improvement in the microemulsion.

Applicants state that the caprylic and capric fatty acids in Farah are esterified with a glycerol and polyethylene glycol, not propylene glycol and are not present in the co-surfactant phase of a self micro-emulsifying carrier. Applicants state that it would not have been obvious to a person skilled in the art that the use of propylene glycol monocaprylate in the co-surfactant phase of a self micro-emulsifying carrier would

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provide pharmaceutical compositions that dramatically increase the dissolution of hydrophobic active principle. Applicants state that a person skilled in the art would not have been motivated to substitute a propylene glycol monocaprylate for the lauric esters of propylene glycol disclosed in Farah in the co-surfactant phase of a self micro-emulsifying carrier since there would have been no reasonable expectation of success with respect to the increased area of the microemulsion and concomitant increase in the dissolution of hydrophobic active principles. Applicants state that the Examiner has not identified any reason why a person skilled in the art would substitute a caprylic ester of propylene glycol (propylene glycol monocaprylate) in the co-surfactant phase for the lauric esters of propylene glycol used in Farah. Applicants submit that in light of unexpected results and because there would have been no reason for a person skilled in the art on reading Farah to substitute a caprylic ester of propylene glycol (propylene glycol monocaprylate) in the co-surfactant phase of a self micro-emulsifying carrier for the lauric esters of propylene glycol used in Farah that all of the claims are patentable over Farah.

This is not found persuasive because propylene glycol monocaprylate was commercially available prior to the invention and the material is used as a co-surfactant in microemulsions. One with ordinary skill in the art would use the commercially available propylene glycol monocaprylate in the microemulsion of Farah and have a reasonable expectation of success with respect to enhanced dissolution of an active agent in the microemulsion.

Rejection of claims 18-23 under 35 U.S.C. § 103(a)

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7. Applicants' arguments, see Pages 8-9, filed 11/5/07, with respect to the rejection of claims 18-23 under 35 U.S.C. § 103(a) as being unpatentable over Farah et al. (US 6,054,136) in view of Lipari et al. (WO 00/37057) have been fully considered but are not persuasive.

Applicants point out that there is no suggestion in Farah to use propylene glycol monocaprylate in the co-surfactant phase. Applicants argue that although Lipari mentions propylene glycol dicaprylate/dicaprate, there is no teaching of a self micro-emulsifying carrier as in the claimed invention and there would be no reason for a person skilled in the art to take the mere mention of an ingredient from a composition identified as a "lipid regulating agent" as a suggestion to include such a component in the co-surfactant phase of the self micro-emulsifying carriers recited in the claims. Applicants submit that the Examiner has not shown where in Farah caprylic and capric acid esters of propylene glycol are disclosed as being present in the co-surfactant phase of a self micro-emulsifying carrier. Applicants submit that Farah and Lipari either combined or separately do not teach or suggest the claimed invention and respectfully request reconsideration and withdrawal of this rejection.

This is not found persuasive because one with ordinary skill would have used the propylene glycol monocaprylate (commercially available prior to the invention) as a co-surfactant in a microemulsion (see data sheet for CAPRYOLTM PGMC) with a reasonable expectation of improving or enhancing the dissolution of an active agent. Propylene glycol mono and dicaprylate are taught by Lipari (Page 5, claim 5).

The statement: "the fatty acid esters of propylene glycol, more specifically, the caprylic and capric acid esters of propylene glycol can be used as co-surfactant" is withdrawn.

Rejection of claims 26-28 under 35 U.S.C. § 103(a)

8. Applicants' arguments, see Page 9, filed 11/5/07, with respect to the rejection of claims 26 and 28 under 35 U.S.C. § 103(a) as being unpatentable over Farah et al. (US 6,054,136) in view of Lipari et al. (WO 00/37057) and further in view of Patel et al. (US 6,248,363) have been fully considered but are not persuasive.

Applicants argue that nothing in Farah or Lipari teaches or suggests using propylene glycol monocaprylate in the co-surfactant phase of a self micro-emulsifying carrier. Applicants argue that none of these references either alone or in combination teach the use of propylene glycol monocaprylate in the co-surfactant phase of a self micro-emulsifying carrier.

This is not found persuasive because one with ordinary skill in the art would have used propylene glycol monocaprylate as a co-surfactant of a microemulsion since it had been commercially available prior to the invention (see letter from Gattefossé USA).

Applicants argue that the compositions disclosed in Patel are directed to the solubilizing hydrophilic pharmaceutical active ingredients whereas the present claims are directed to hydrophobic active principles. This is not found persuasive because Patel teaches the improvement of the bioavailability of simvastatin (which is a hydrophobic active agent) by using the surfactant lauric macrogolglyceride (Col. 35, line 46, Col. 65, lines 50-53, claim 16).

Claim Rejections - 35 USC § 112

9. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

10. Claim 14 is rejected under 35 U.S.C. 112, first paragraph, because the specification, while being enabling for a statin as a water insoluble active (page 4, lines 24-28), does not reasonably provide enablement for any active principle.

The claimed invention is not supported by an enabling disclosure taking into account the *Wands* factors. *In re Wands*, 858/F.2d 731, 8 USPQ2d 1400 (Fed. Cir. 1988). *In re Wands* lists a number of factors for determining whether or not undue experimentation would be required by one skilled in the art to make and/or use the invention. These factors are: the quantity of experimentation necessary, the amount of direction or guidance presented, the presence or absence of working examples of the invention, the nature of the invention, the state of the prior art, the relative skill of those in the art, the predictability or unpredictability of the art, and the breadth of the claim.

The scope of the claim is broad enough to encompass the use of any active principle, not just the use of statins such as simvastatin.

The specification provides guidance for using statins as active agents in the composition because "simvastatin undergoes a strong first intestinal passage effect" (page 1, lines 10-13).

Working examples provided are directed toward compositions comprising of simvastatin (page 4, examples 1-3).

The specification does not teach that any active principle can be used in the composition. The nature of the composition is such that the active principle would have to interact with the lipophilic/hydrophobic phase and not all active principles have this property.

The nature of the invention is a composition comprising (a) an active principle, (b) a self micro-emulsifying carrier comprising of (i) a lipophilic phase, (ii) a surfactant phase, (iii) a co-surfactant phase.

The state of the prior art teaches that simvastatin is a relatively hydrophobic compound (Mauro, page 197). Igel et al. teach that, "with the exception of pravastatin and rosuvastatin, all statins are lipophilic compounds (Igel et al., page 836). It is also taught that "all statins undergo hepatic metabolism via cytochrome P450 isoenzymes" and these isoenzymes "are the most abundant and account for approximately ... 80% in small intestinal mucosa" (Igel et al., page 838).

Undue experimentation would be required to use the invention because it is not clear which active principle is going to be used in the composition. In order to use any active principle with the invention, the quantity of experimentation would be too great.

The specification does not enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to use the invention commensurate in scope with this claim. It would require undue experimentation to use the invention based on the breadth of these claim.

Claim Rejections - 35 USC § 103

11. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

12. Claims 14-17, 24-25, and 27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Farah et al. (US 6,054,136) in view of data sheets for CAPRYOL™ 90 and CAPRYOL™ PGMC and letter from Gattefossé USA (January 29, 2008).

The claimed invention is a pharmaceutical composition comprising (a) a therapeutically effective amount of a hydrophobic active principle and (b) a self micro-emulsifying carrier. The self micro-emulsifying carrier comprising: (i) a lipophilic phase comprising a mixture of glycerol mono-, di- and triesters and of PEG mono- and diesters with at least one fatty acid chosen from the group consisting of C8-C 18 fatty acids; (ii) a surfactant phase comprising a mixture of glycerol mono-, di- and triesters and of PEG mono- and diesters with caprylic acid (C8) and capric acid (C10); and (iii) a co-surfactant phase comprising at least one ester of a polyvalent alcohol with at least one fatty acid chosen from a group consisting of propylene glycol monocaprylate; said surfactant and co-surfactant being in a ratio by weight between 0.2 and 6.

Farah teaches a self-microemulsifying drug delivery system (Col. 1, lines 10-19). The composition is for oral use and is capable of forming a microemulsion in situ with the biological fluid of the body and comprises a pharmaceutical active ingredient, a lipophilic phase, a surfactant, and a co-surfactant (Col. 8, lines 39-43, Claim 1). The

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surfactant is "obtained by an alcoholysis reaction of polyethylene glycol and a fraction of oil ... consisting of caprylic and capric acids" (Col. 8, Claim 1). The surfactant and co-surfactant ratio is 0.5 (Col. 5, line 67). The surfactant has an HLB of less than 16 (Col. 9, line 47). The lipophilic phase of the composition has an HLB of less than 16 (Col. 8, lines 44-45 and lines 50-51).

Farah does not expressly teach the lipophilic phase of the composition being in the range 50%-95% by weight or the use of propylene glycol monocaprylate as the co-surfactant in the microemulsion.

The data sheets for CAPRYOL™ 90 and CAPRYOL™ PGMC disclose that propylene glycol monocaprylate is used as a microemulsion component SMEDDS and as a co-surfactant for microemulsions respectively. (Please see attached data sheets). The letter from Gattefossé USA (January 29, 2008) states that CAPRYOL™ 90 and CAPRYOL™ PGMC have been available commercially since approximately 1998.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to make a self-microemulsifying drug delivery system, as suggested by Farah, and use the propylene glycol monocaprylate as a co-surfactant for the microemulsion, as disclosed in the data sheets for CAPRYOL™ 90 and CAPRYOL™ PGMC, and produce the instant invention.

One of ordinary skill in the art would have been motivated to do this because CAPRYOL™ PGMC was commercially available prior to the invention and the technical data sheet discloses that this product is used as a co-surfactant for microemulsions.

From the teachings of the references, it is apparent that one of ordinary skill in the art would have had a reasonable expectation of success in producing the claimed invention. Therefore, the invention as a whole was *prima facie* obvious to one of ordinary skill in the art at the time the invention was made, as evidenced by the references, especially in the absence of evidence to the contrary.

Regarding instant claim 14, the pharmaceutical composition comprising a therapeutically effective amount of a hydrophobic active and a self micro-emulsifying carrier would have been obvious to one skilled in the art over the self-microemulsifying drug delivery system taught by Farah (Col. 1, lines 10-19). The limitation of the lipophilic phase, the surfactant phase, and the co-surfactant phase would have obvious over the lipophilic phase, the surfactant, and the co-surfactant taught by Farah (Col. 8, lines 39-43, Claim 1). The limitation of a mixture of glycerol mono-, di- and triesters and of PEG mono- and diesters with at least one fatty acid chosen from the group consisting of C8-C 18 fatty acids would have been obvious over the lipophilic phase that consists of a mixture of C₈ to C₁₈ polyglycolized glycerides as taught by Farah (Abstract). The limitation of a surfactant phase comprising a mixture of glycerol mono-, di- and triesters and of PEG mono- and diesters with caprylic acid (C8) and capric acid (C10) would have been obvious over the surfactant that is "obtained by an alcoholysis reaction of polyethylene glycol and a fraction of oil ... consisting of caprylic and capric acids" as taught by Farah (Col. 8, Claim 1). The limitation of a co-surfactant phase comprising at least one ester of a polyvalent alcohol with at least one fatty acid chosen from a group consisting of propylene glycol monocaprylate would have been obvious over the data

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sheets for CAPRYOL™ 90 and CAPRYOL™ PGMC and letter from Gattefossé USA (January 29, 2008) that shows that propylene glycol monocaprylate was available commercially prior to the invention. The limitation of the surfactant and co-surfactant being in a ratio by weight between 0.2 and 6 would have been obvious during the process of routine experimentation because one of ordinary skill in the art would modify the ratio of the surfactant and co-surfactant based on the desired dissolution of the active ingredient and based on the desired bioavailability of the active ingredient.

As to claim 15, Farah teaches the lipophilic phase of the composition being in the range 1%-75% by weight and having an HLB of less than 16 (Col. 8, lines 44-45 and lines 50-51). The HLB of the lipophilic phase of the instant application is 14; therefore it is anticipated by Farah. Although the weight range of the lipophilic phase of the instant application does not overlap the weight range disclosed in the reference, a person with ordinary skill in the art could, absent evidence to the contrary, arrive at the optimal weight range without undue experimentation.

As to claims 16 and 17, Farah teaches that the surfactant-co-surfactant mixtures range from 18.5%-35% of the weight of the composition (Examples 1 and 3, Col. 5, lines 22-24 and lines 65-67). Although the surfactant and co-surfactant levels of the instant application do not exactly overlap the combined surfactant-co-surfactant levels of the reference, a person with ordinary skill in the art could, absent evidence to the contrary, arrive at the optimal weight levels without undue experimentation.

Regarding instant claim 24, the ratio of the surfactant and co-surfactant would have been obvious over the micro-emulsifying composition taught by Farah (Col. 8,

lines 39-43, Claim 1) because during the process of routine experimentation because one of ordinary skill in the art would modify the ratio of the surfactant and co-surfactant based on the desired dissolution of the active ingredient and based on the desired bioavailability of the active ingredient.

Regarding instant claims 25 and 27, the limitation of the HLB would have been obvious over the HLB of less than 16 for the lipophilic phase of the composition taught by Farah (Col. 8, lines 44-45 and lines 50-51).

13. Claims 18-23 rejected under 35 U.S.C. 103(a) as being unpatentable over Farah et al. (US 6,054,136), in view of data sheets for CAPRYOL™ 90 and CAPRYOL™ PGMC and letter from Gattefossé USA (January 29, 2008) and further in view of Lipari et al. (WO 00/37057).

The teaching of Farah is stated above.

Farah does not expressly teach statins in the composition.

Lipari teaches "formulations for oral administration comprising lipid regulating agents having enhanced bioavailability" (Page 3). The formulation contains propylene glycol fatty acid esters that includes propylene glycol monocaprylate (Page 3, Page 5 Claims 5 and 6). Lipari also specifically teaches the use of a statin in the formulation (Page 5, Claim 4).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to make a self-microemulsifying drug delivery system, as suggested by Farah, use the propylene glycol monocaprylate as a co-surfactant for the

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microemulsion, as disclosed in the data sheets for CAPRYOL™ 90 and CAPRYOL™ PGMC, and with the statin formulation with propylene glycol monocaprylate, as taught by Lipari, and produce the instant invention.

One of ordinary skill in the art would have been motivated to do this because CAPRYOL™ PGMC was commercially available prior to the invention and the technical data sheet discloses that this product is used as a co-surfactant for microemulsions. Moreover, Lipari teaches the improved bioavailability of the statin that would be conferred by forming a microemulsion.

Regarding instant claims 18-21, the limitation of the statin and the percentage of the statin would have been obvious over the micro-emulsifying composition taught by Farah (Col. 8, lines 39-43, Claim 1), in view of the propylene glycol monocaprylate used as a co-surfactant (data sheet for CAPRYOL™ PGMC), and further in view of the enhanced bioavailability of a statin formulation, as taught by Lipari (Page 3, Page 5 Claims 4, 5 and 6).

As to claims 22 and 23, a person with ordinary skill in the art could, absent evidence to the contrary, arrive at the optimal weight of the active ingredient (simvastatin) in the composition without undue experimentation given the statin formulation taught by Lipari (Page 3, Page 5 Claims 4, 5 and 6).

14. Claims 26 and 28 rejected under 35 U.S.C. 103(a) as being unpatentable over Farah et al. (US 6,054,136), in view of data sheets for CAPRYOL™ 90, CAPRYOL™ PGMC, and LABRASOL®, and letter from Gattefossé USA (January 29, 2008) and further in view of Patel et al. (US 6,248,363).

The teaching of Farah is stated above. The emulsifying system in this references do not specifically include lauric macroglycerides and caprylocapric macroglycerides.

The data sheet for LABRASOL® shows that this product is a caprylocaproyl macroglyceride and the letter from Gattefossé USA (January 29, 2008) shows that this product was commercially available since approximately 1972.

Patel teaches that the bioavailability of simvastatin (Col. 6, line 49) can be improved by their invention, which includes the surfactant lauric macroglycerides as the surfactant (Col. 35, line 46, Col. 65, lines 50-53, claim 16). The preferred surfactants include lauryl macroglycerides (Col. 30, lines 45-47). The use of caprylic/capric glycerides is also disclosed (Col. 17, Table 5).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to make a self-microemulsifying drug delivery system, as suggested by Farah, use the propylene glycol monocaprylate as a co-surfactant for the microemulsion, as disclosed in the data sheets for CAPRYOL™ 90 and CAPRYOL™ PGMC, and the caprylocaproyl macroglyceride as disclosed in the data sheet for LABRASOL®, and with the lauric macroglycerides and caprylic/capric glycerides, as taught by Patel, and produce the instant invention.

One of ordinary skill in the art would have been motivated to do this because the data sheet for LABRASOL® shows that the product is used as a bioavailability enhancer for poorly soluble drugs and this product was commercially available prior to

the invention. Moreover, Patel discloses that these surfactants work in emulsifying systems for improving bioavailability of poorly soluble drugs (like statins).

Regarding instant claim 26, the lauric macrogolglycerides would have been obvious over the lauryl macrogolglycerides taught by Patel (Col. 30, lines 45-47).

Regarding instant claim 28, the caprylocapric macrogolglycerides would have been obvious over the caprylic/capric glycerides disclosed by Patel (Col. 17, Table 5) and over the data sheet for LABRASOL® (caprylocaproyl macrogolglyceride) which was commercially available since approximately 1972.

Conclusion

15. No claims are allowed.


16. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Aradhana Sasan whose telephone number is (571) 272-9022. The examiner can normally be reached Monday to Thursday from 6:30 am to 5:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Woodward, can be reached at 571-272-8373. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only.

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For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



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